

PSYCHE.

NOTES ON NEW ENGLAND ACRIDIDAE.—III. OEDIPODINAE.—II.

BY ALBERT P. MORSE, WELLESLEY, MASS.

KEY.

1. Wings black, with a pale border Sp. 23, *Dissosteira carolina*.
- 1¹. Wings not black.
2. Disk of wings nearly or quite transparent, not distinctly bounded by a blackish border (cf. Fig. 21a).
3. Intercalary vein of tegmen nearer ulnar than radial vein for its entire length; discoidal area as wide as widest part of ulnar area (Fig. 19). Wings faintly clouded with dusky at tip and usually transparent yellowish at base. Sp. 19, *Encoptolophus sordidus*.
- 3¹. Intercalary vein of tegmen approximated distally to radial vein. (Figs. 18a, 20a.)
4. Discoidal area of tegmen much narrower than distal end of ulnar area (Fig. 18a). Ulnar area of wing broadened distally at expense of discoidal area, being three times as wide (Fig. 18). Wings faintly clouded with dusky opposite middle of hind margin. Sp. 18, *Chortophaga viridifasciata*.
- 4¹. Discoidal area of tegmen about equal in width to distal end of ulnar area (Fig. 20a). Wing with distal part of ulnar area not broadened, about equal to discoidal area in width (Fig. 20). Wings with dusky venules and transparent except for faint dusky clouding at extreme tip and sometimes a slight opacity at extreme base. Sp. 20, *Camnula pellucida*.
- 2¹. Disk of wings opaque, colored (white, yellow, orange, red), distinctly bounded by a blackish border (Figs. 21a, 30).
- 5 (5¹, 5²). Carina of pronotum entire, unnotched in side view (Figs. 16, 17). Scutellum of vertex with a distinct, usually deep, transverse curved impression (Fig. 16a). Antennae about equal to head plus pronotum. Disk of wings bright yellow.

6. Hind process of pronotum acute-angled in dorsal view, its sides concave. Carina of pronotum in side view crestlike, high, arched, compressed (Fig. 16). Dusky band of wing with sub-frontal shoot extending usually one-fourth to one-third the distance across disk to base of wing.

Sp. 16, *Arphia xanthoptera*.

6¹. Hind process of pronotum about right-angled, ♂, or a little obtuse, ♀; carina rather low (Fig. 17). Dusky band of wing with sub-frontal shoot usually extending two-thirds of the distance to base of wing.

Sp. 17, *Arphia sulphurea*.

5¹(5²). Carina of pronotum with one notch or incision in side view. Scutellum of vertex without deep transverse arcuate impression.

7. Width of dusky wingband taken on subfrontal shoot two or three times its width elsewhere (Fig. 21a). Antennae short, equal to head plus pronotum or but little longer (if longer the prozona and metazona of equal length). Robust species.

8. Prozona distinctly shorter than metazona. Vertex prominent (Fig. 21). Hind process of pronotum acute or right-angled. Wings usually red. Antennae short, equal to head plus pronotum.

Sp. 21, *Hippiscus tuberculatus*.

8¹. Prozona and metazona of equal length; the lateral carinae not cut by principal sulcus (Fig. 22). Vertex convex, the scutellum but little impressed, divided by a median and two oblique carinulae. Hind process of pronotum obtuse-angled. Wings usually yellowish, sometimes orange or red.

Sp. 22, *Hippiscus rugosus*.

7¹. Width of dusky wingband on subfrontal shoot rarely over once and a half its width elsewhere. Antennae long, once and a half or twice as long as head plus pronotum. Slenderer species, the body often compressed.

9 (9¹, 9²). Hind tibiae not dusky-ringed. Hind part of disk of prozona elevated, rising broadly on the carina.

10. Carina high, arched; the cleft oblique, the lobes sometimes overlapping (Fig. 24a). Hind process acute, its sides concave (Fig. 24.) Hind tibiae red, sometimes paler at base.

Sp. 24, *Spharagemon collare scudderi*.

10¹. Carina rather low, usually sinuate on prozona; cleft nearly or quite vertical (Fig. 25a). Hind process about right-angled, its sides straight (Fig. 25). Hind tibiae distinctly pale-ringed next base.

Sp. 25, *Spharagemon saxatile*.

9¹ (9²). Hind tibiae ringed with dusky and coral-red, and pale next base.

11. Carina rather high, reaching level of top of head. Eyes not prominent. Vertex projecting the width of an eye. Body distinctly compressed. (Figs. 26-26c). Sp. 26, *Spharagemon bolli*.
- 11¹. Carina low. Pronotum constricted on prozona and depressed below top of head. Eyes prominent. Vertex short, less projecting. Body little compressed (Figs. 27-27b).
Sp. 27, *Scirtetica marmorata*.
- 9². Hind tibiae ringed with dusky and yellowish white. Prozona much constricted. Tegmen with many of the distal cellules in the hinder part of the distal half two to four times as long as wide.
Sp. 28, *Psinidia fenestralis*.
- 5². Carina of pronotum with two distinct notches, the anterior often less marked than the posterior.
12. Transverse dusky band of wings broad throughout (at least as broad as the width of a tegmen), continuous. Anterior notch of pronotum often shallow.
13. Tegmen with most of the cellules in the hinder part of the distal half but little longer than wide (Fig. 27b). Hind tibiae pale (ashy or rose) at base, ringed beyond with dusky and coral-red. Sp. 27, *Scirtetica marmorata*.
- 13¹. Tegmen narrow, many of the cellules in hinder part of distal half two to four times as long as wide (Fig. 28). Hind tibiae ringed with dusky and yellowish white.
Sp. 28, *Psinidia fenestralis*.
- 12¹. Transverse dusky wingband narrow, usually discontinuous behind subfrontal shoot (Fig. 30). Carina of pronotum very low, the notches almost equally distinct.
14. Hind tibiae entirely pale. Radial veins of wing not enlarged (cf. Fig. 30). General color pale brown or buff and white. Sides of pronotum usually distinctly angulate at meeting of lower and hind margins (Fig. 29).
Sp. 29, *Trimerotropis maritima*.
- 14¹. Hind tibiae dusky at tip and usually also at two-fifths of the distance from base to tip, elsewhere yellowish white. Radial area of wing expanded and two or three radial veins distinctly enlarged (Fig. 30). General color dark gray or black.
Sp. 30, *Circotettix verruculatus*.